EUFORES Workshop NL

Joël Meggelaars

windeurope.org | 10 October 2018

Representing the whole wind industry

450
MEMBERS

Wind turbine manufacturers	e.g.	SIEMENS Gamesa RENEWABLE ENERGY	MHI VESTAS OFFSHORE WIND	GE Renewable Energy	
Wind farm developers	e.g.	acciona Energy	res powering change	Ørsted	VATTENFALL
Power utilities	e.g.	e·on	Eneco	enel Green Power	IBERDROLA Renovables
Component manufacturers	e.g.	ABB	LM WIND POWER	BASF We create chemistry	ZF
Installation / logistics	e.g.	Seaway Heavy Lifting	Van Oord Marine ingenuity	DAMEN	
Financial & legal services	e.g.	Allianz	Rabobank	Baker McKenzie.	
Ports	e.g.	GRONINGEN SEAPORTS	greenporthull	NANTES SAINT-NAZAIRE PORT	Port Oostende

+ National wind associations

WindEurope

NWEA

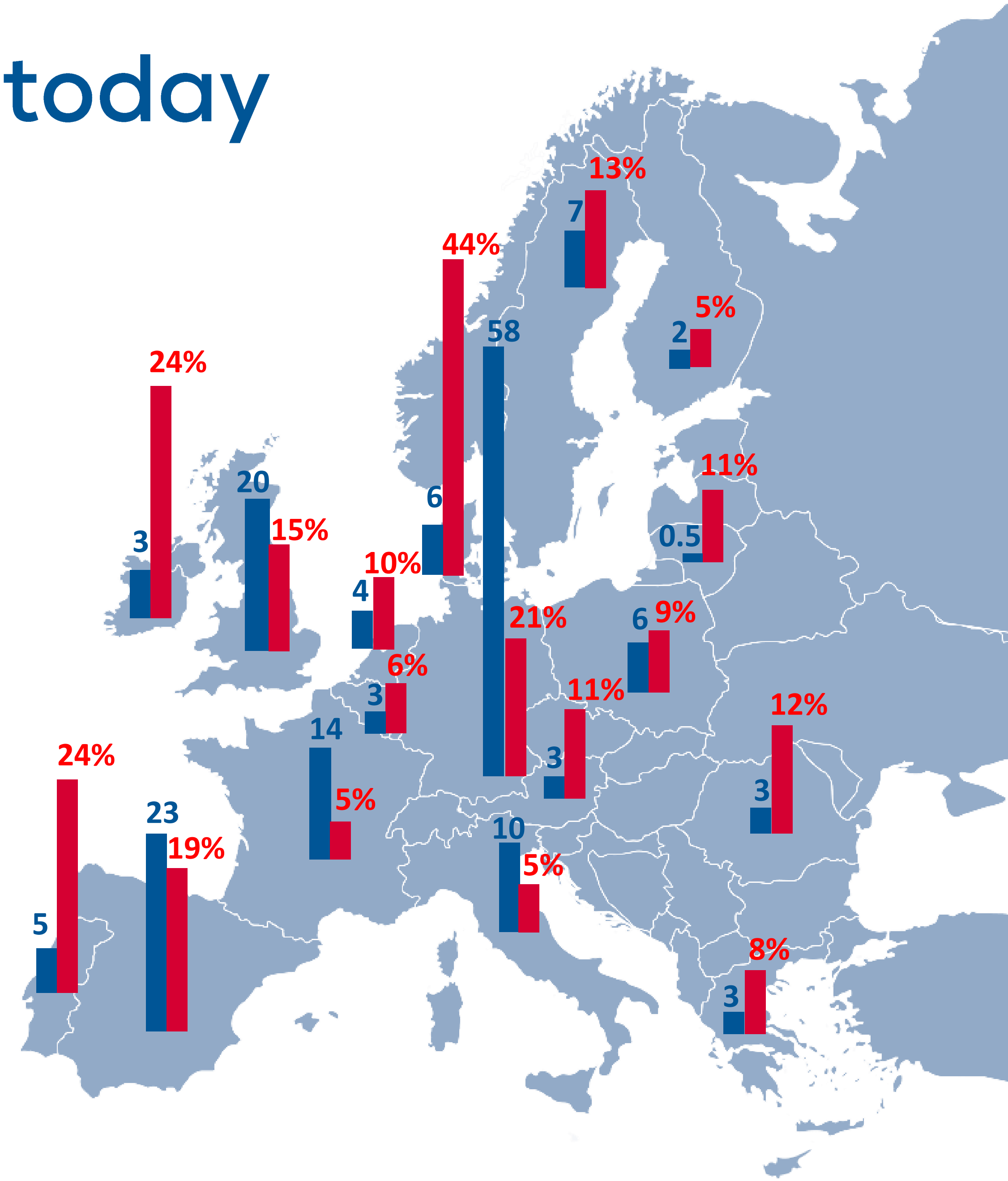
Wind energy today

173 GW

By 30 June 2018

12%

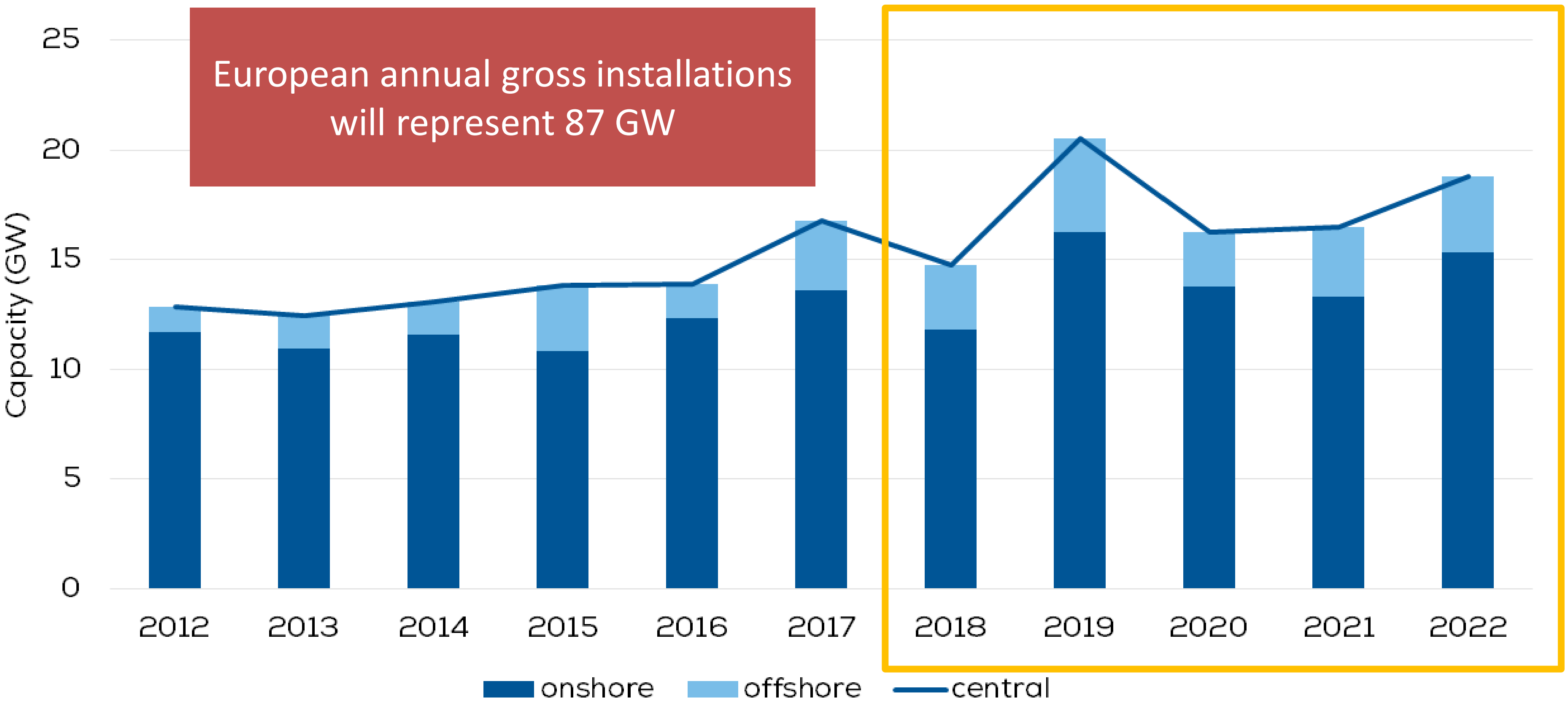
of 2017 EU power demand



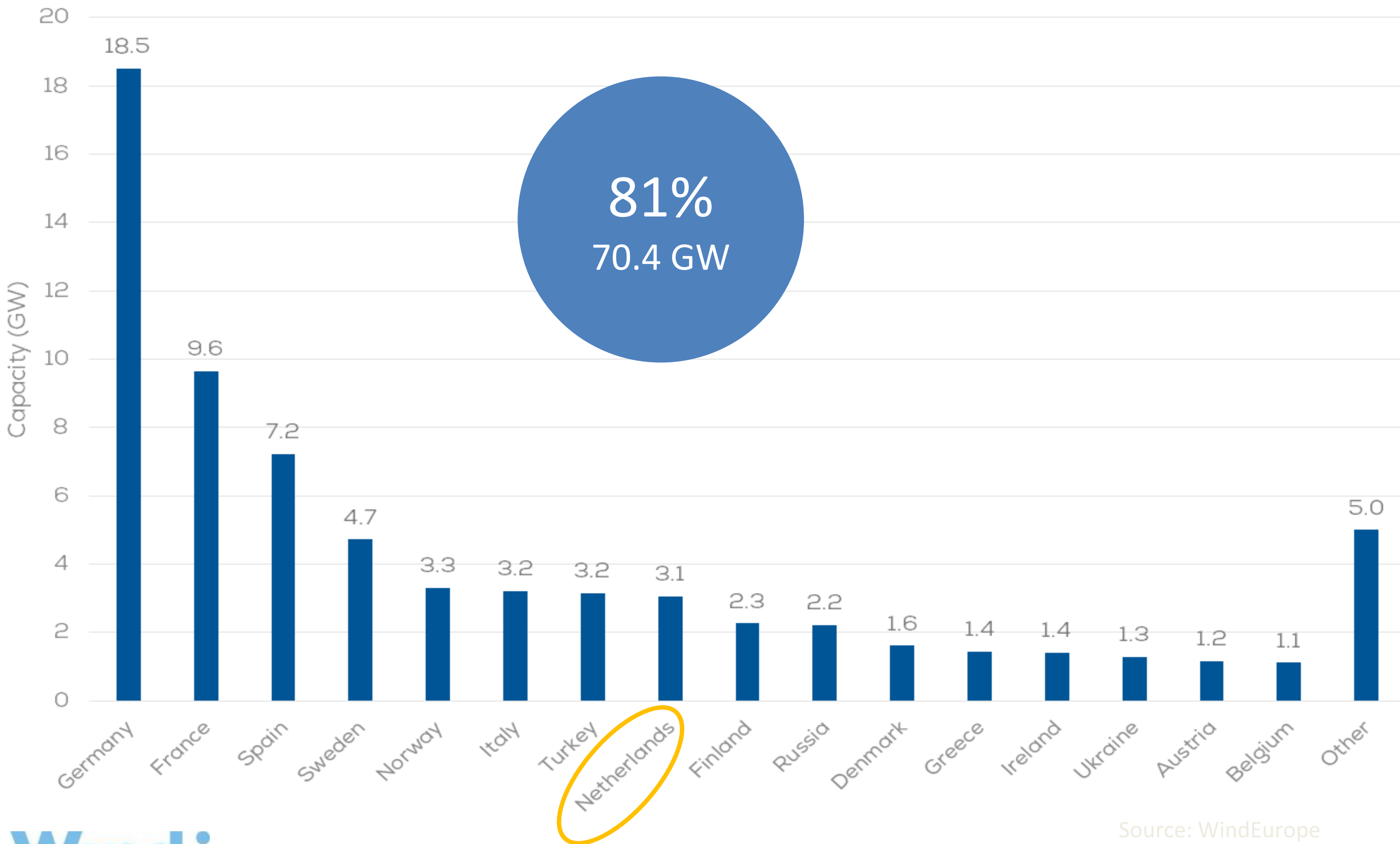
GW installed

Penetration

2018-2022: wind will keep growing in Europe



2018-2022 expected onshore installations



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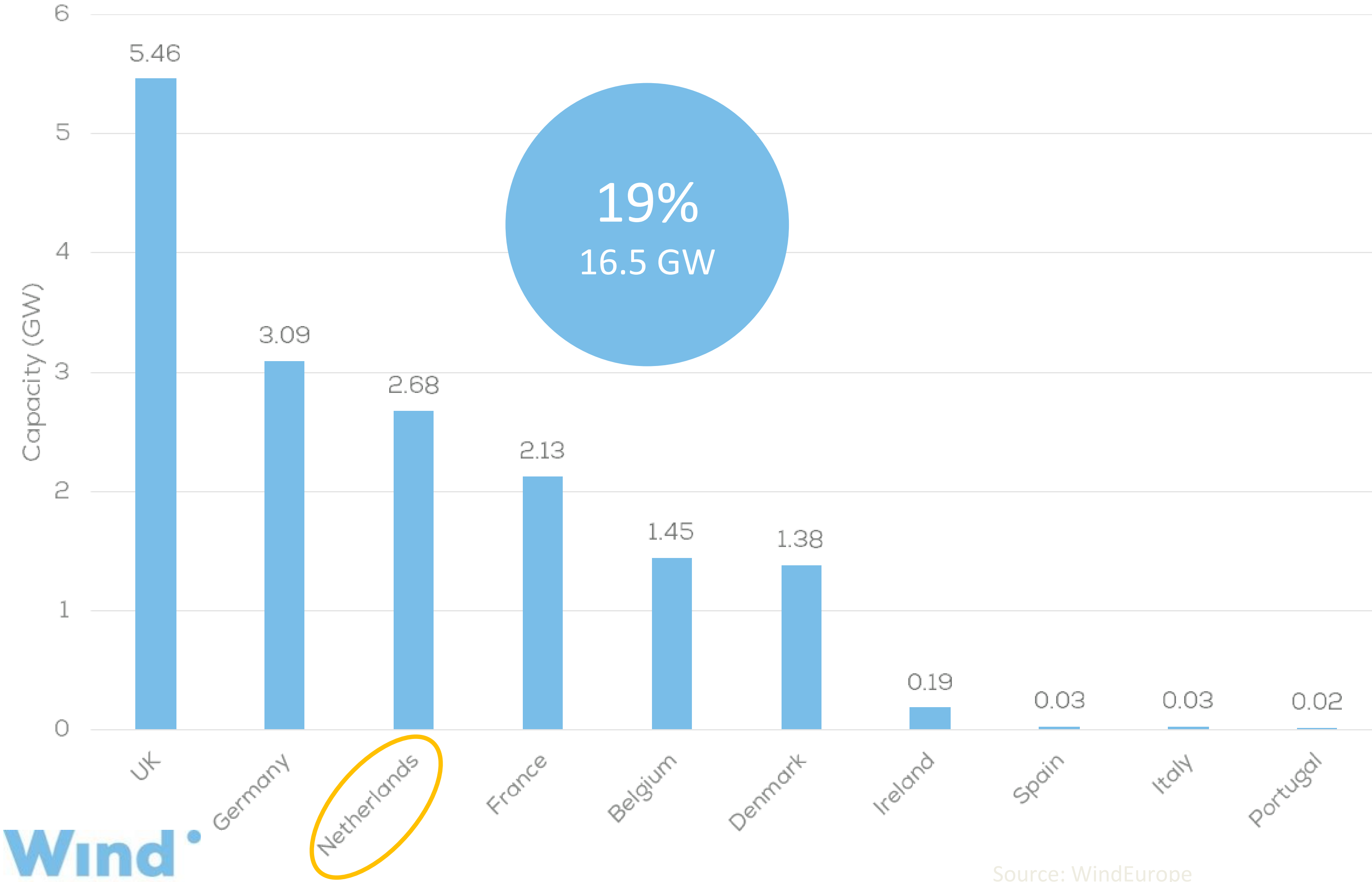
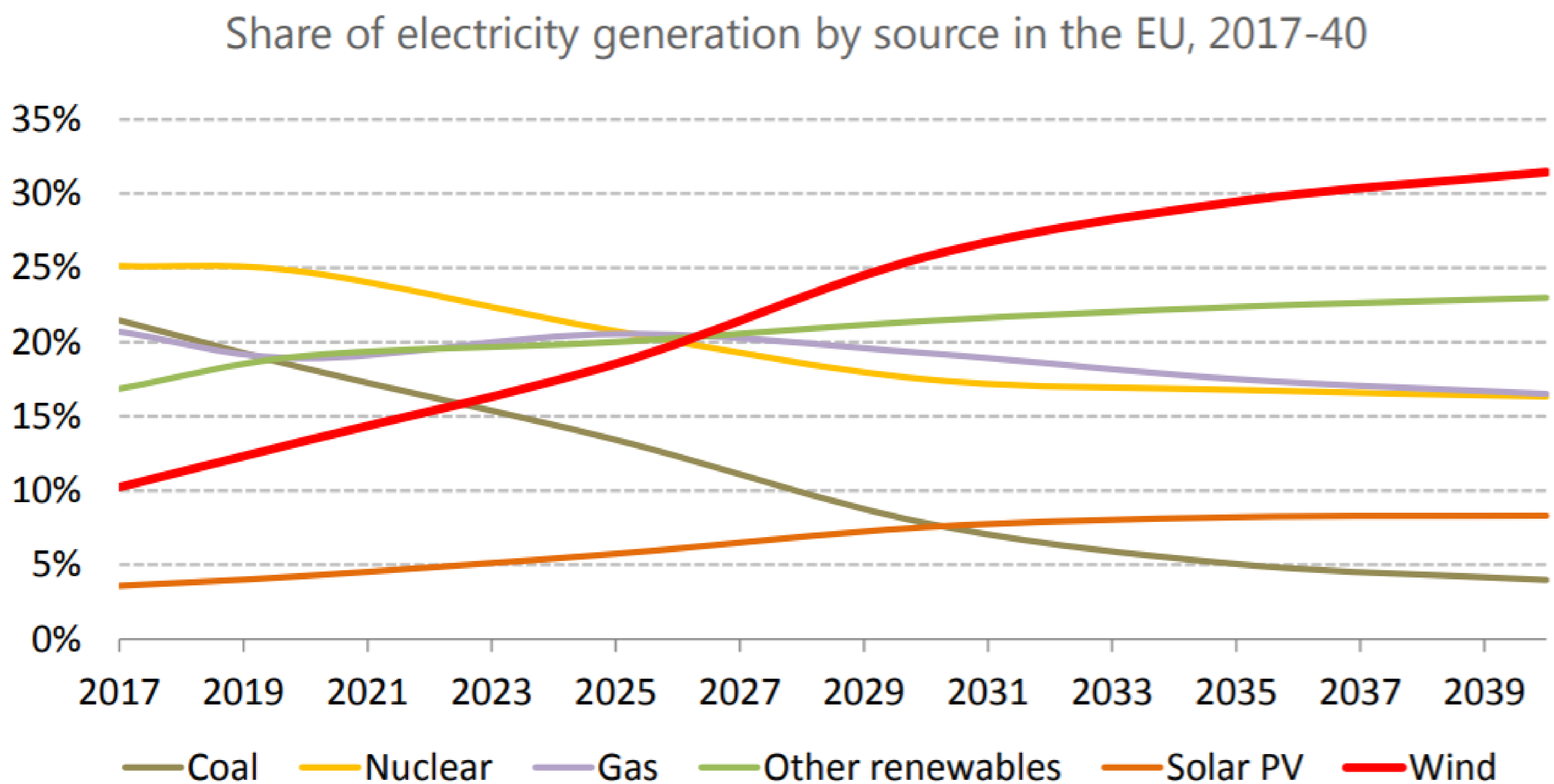
2018-2022 expected offshore installations



Source: WindEurope

Wind will become the largest power source in the EU before 2030



WindEurope

Source: International Energy Agency (IEA)

1. Drive offshore build-out

- Introduce a new long-term auction schedule

Clarity on the pipeline helps the Dutch supply chain

WindEurope

1. Drive offshore build-out

- Maintain long-term auction schedule
- Do not introduce concession payments

Rationale for concession payments is linked to scarce resources

Scarce

Oil & gas

Limited resource and low/no impact on world market price

Mobil phone network

Limited range of frequency bands to be used

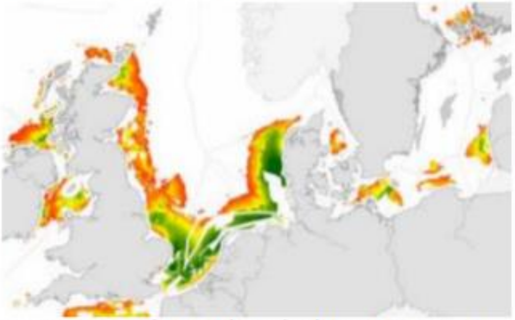
Fishing

Limited resource and risk of overfishing

Non-scarce

Offshore wind energy

Potential: Northern Seas



Wind is non-scarce and sites are non-scarce at North Sea level, direct impact on local/regional market price

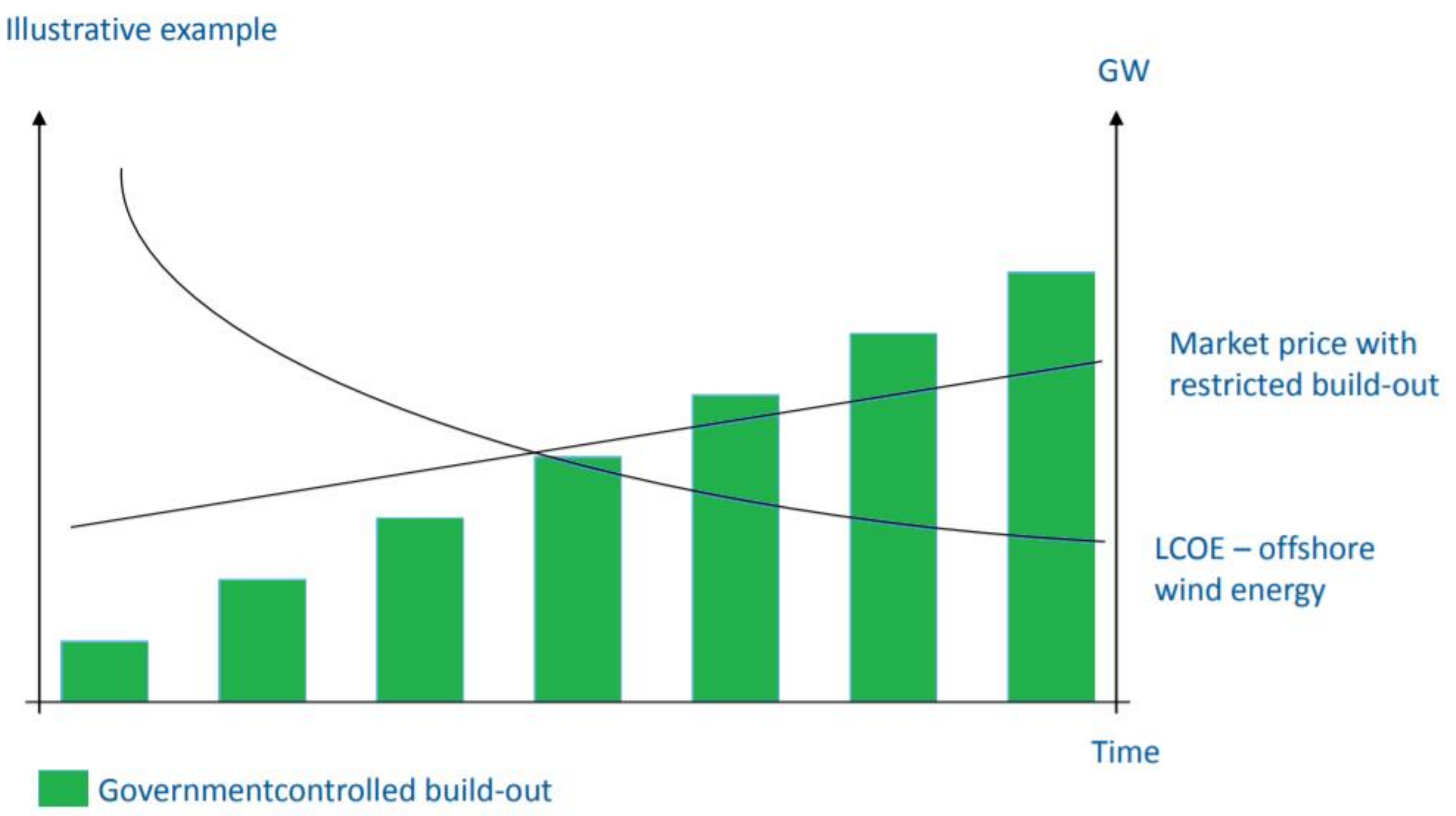
App. 600 GW ≈ 80% of EU's electricity consumption

Max LCOE €65/MWh in 2030, incl. transmission asset to shore

Other uses, seabed, distance, Natura 2000 areas etc. taken into consideration

WindEurope

Market driven development brings cost reductions



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1. Drive offshore build-out

- Maintain long-term auction schedule
- Do not introduce concession payments
- Keep current de-risking approach
- Combine it with the UK Contracts for Difference (CfD)

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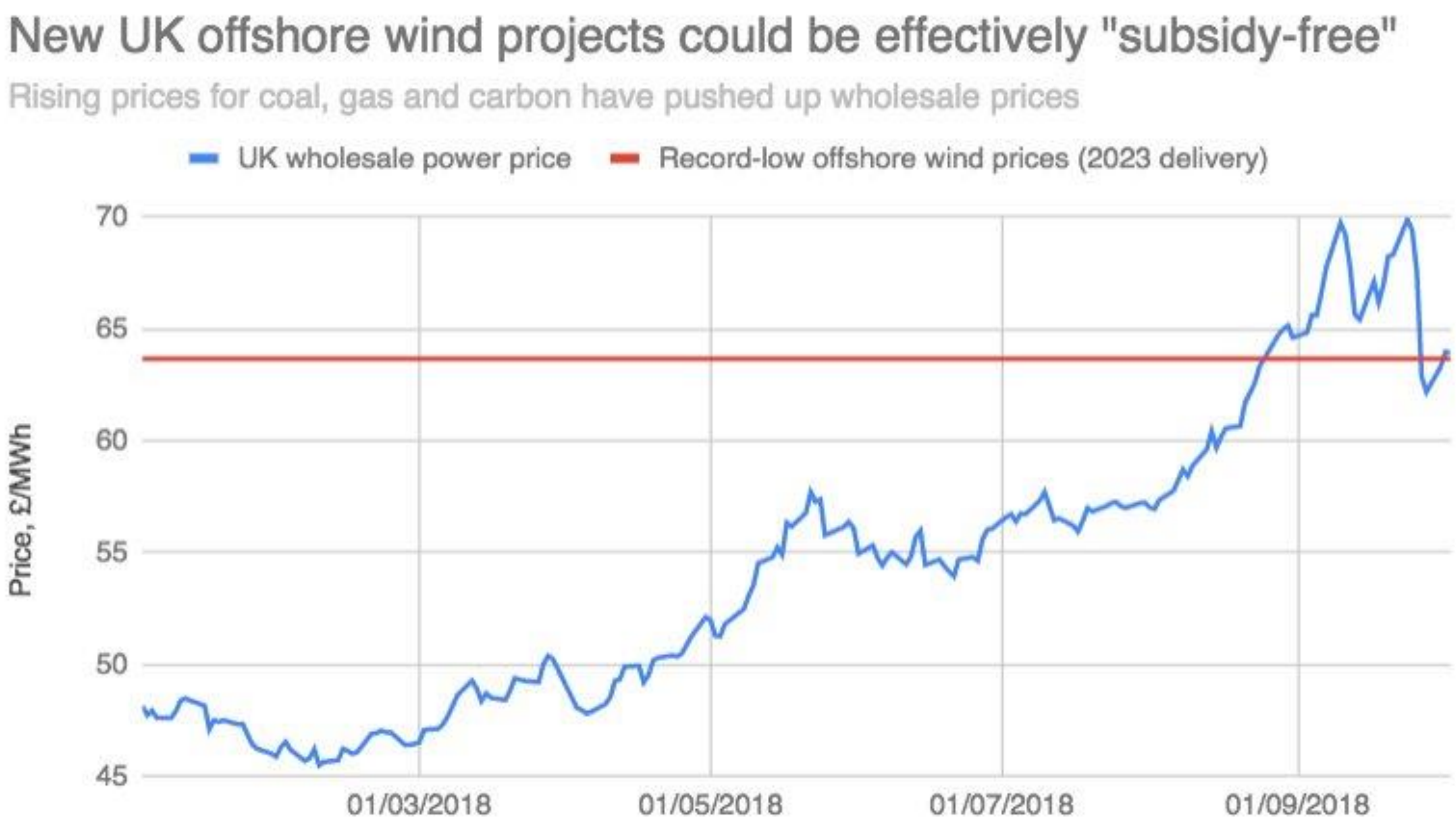
CfD: potentially cost-neutral to society



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1. Drive offshore build-out

- Maintain long-term auction schedule
- Do not introduce concession payments
- Keep current de-risking approach
- Combine it with the UK Contracts for Difference (CfD)
- Pursue ambitious electrification agenda to accelerate offshore wind deployment

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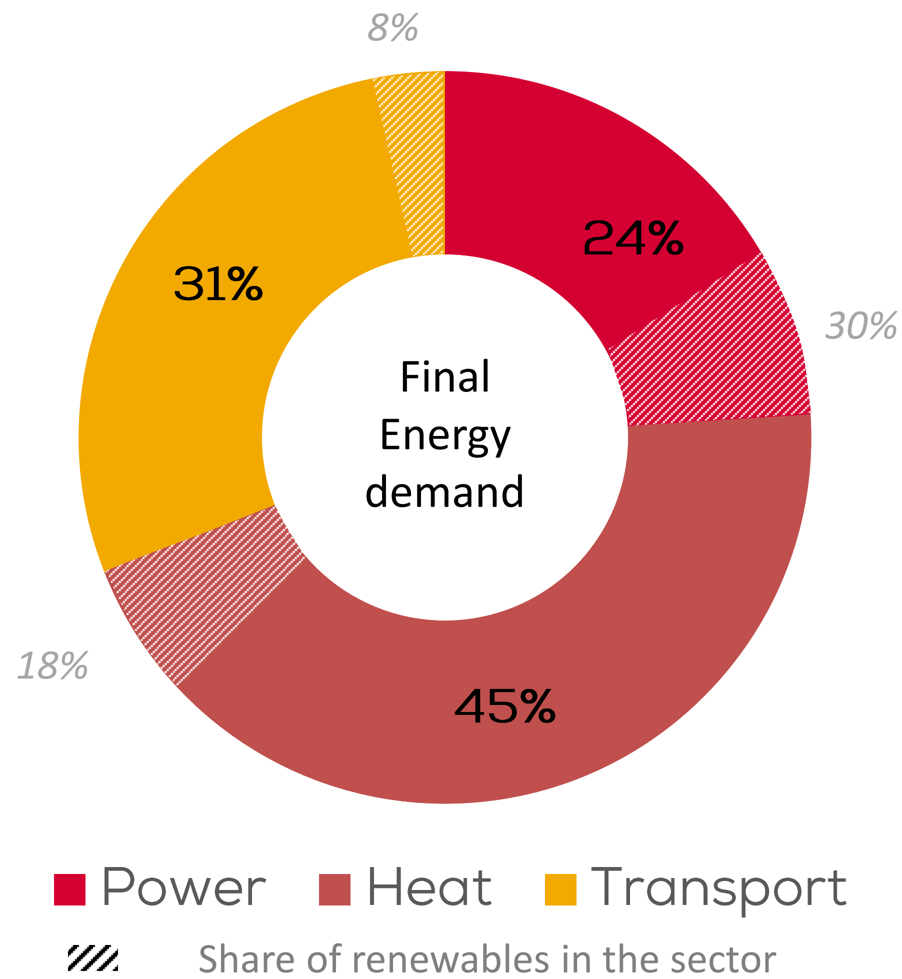
2. Drive demand for electricity



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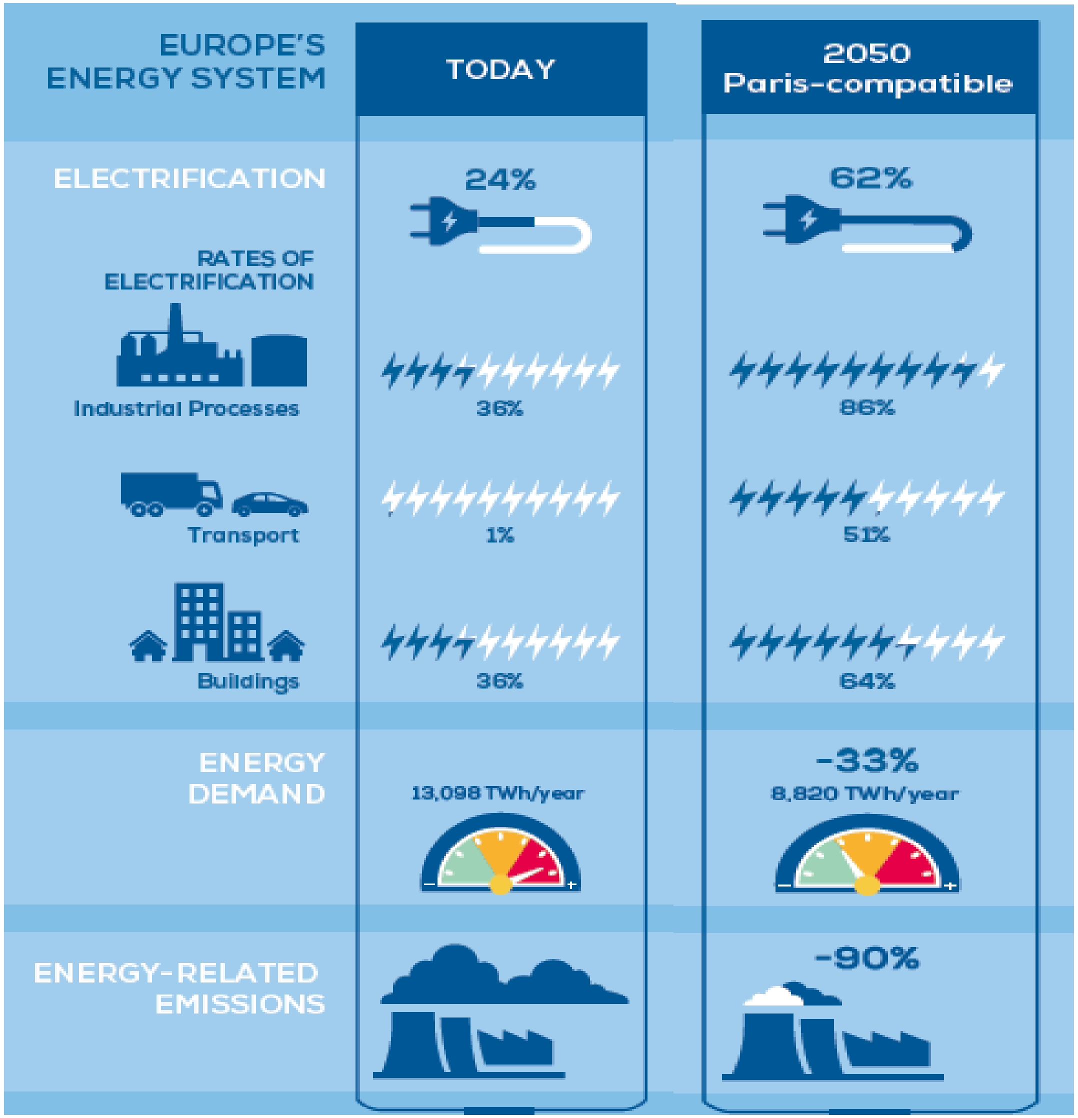
Breaking new ground



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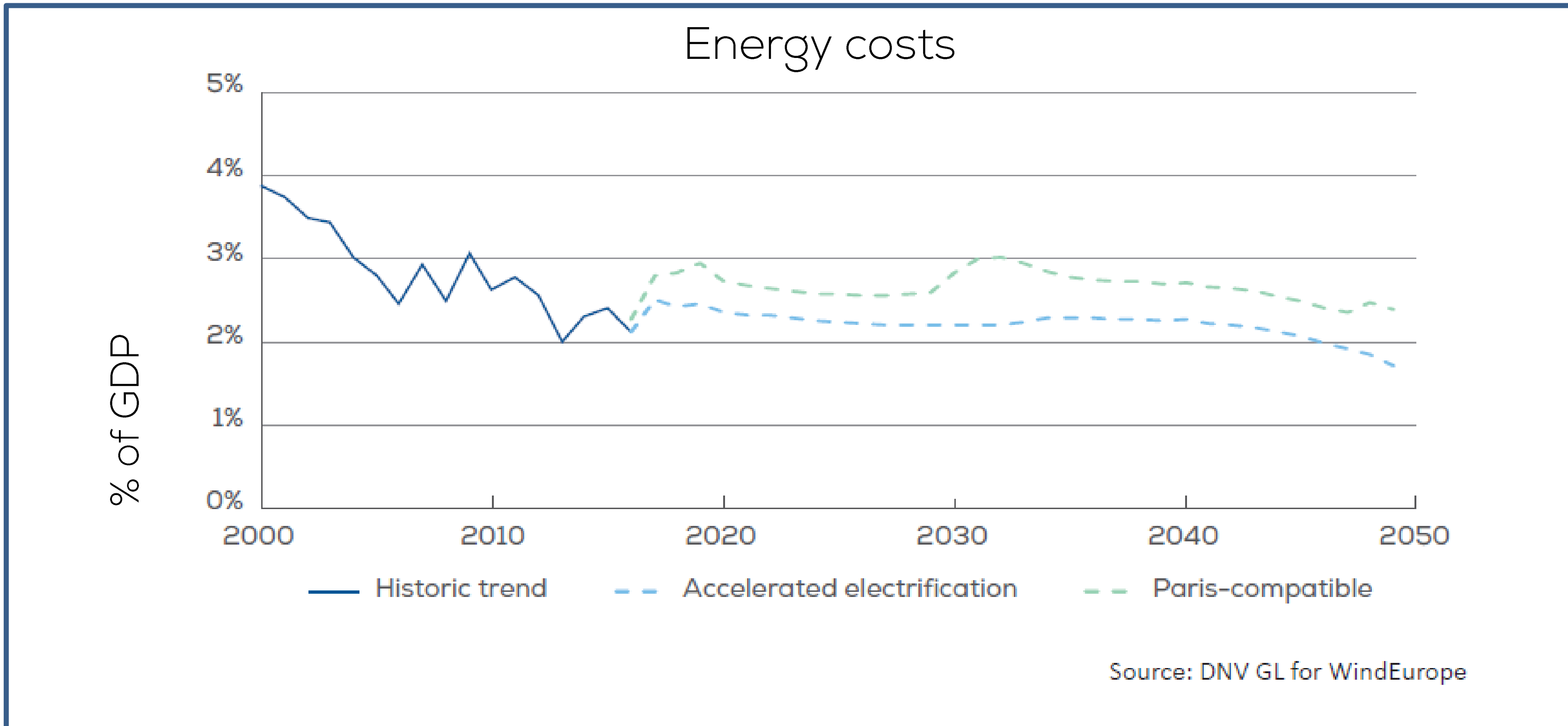
Ambitious electrification is affordable



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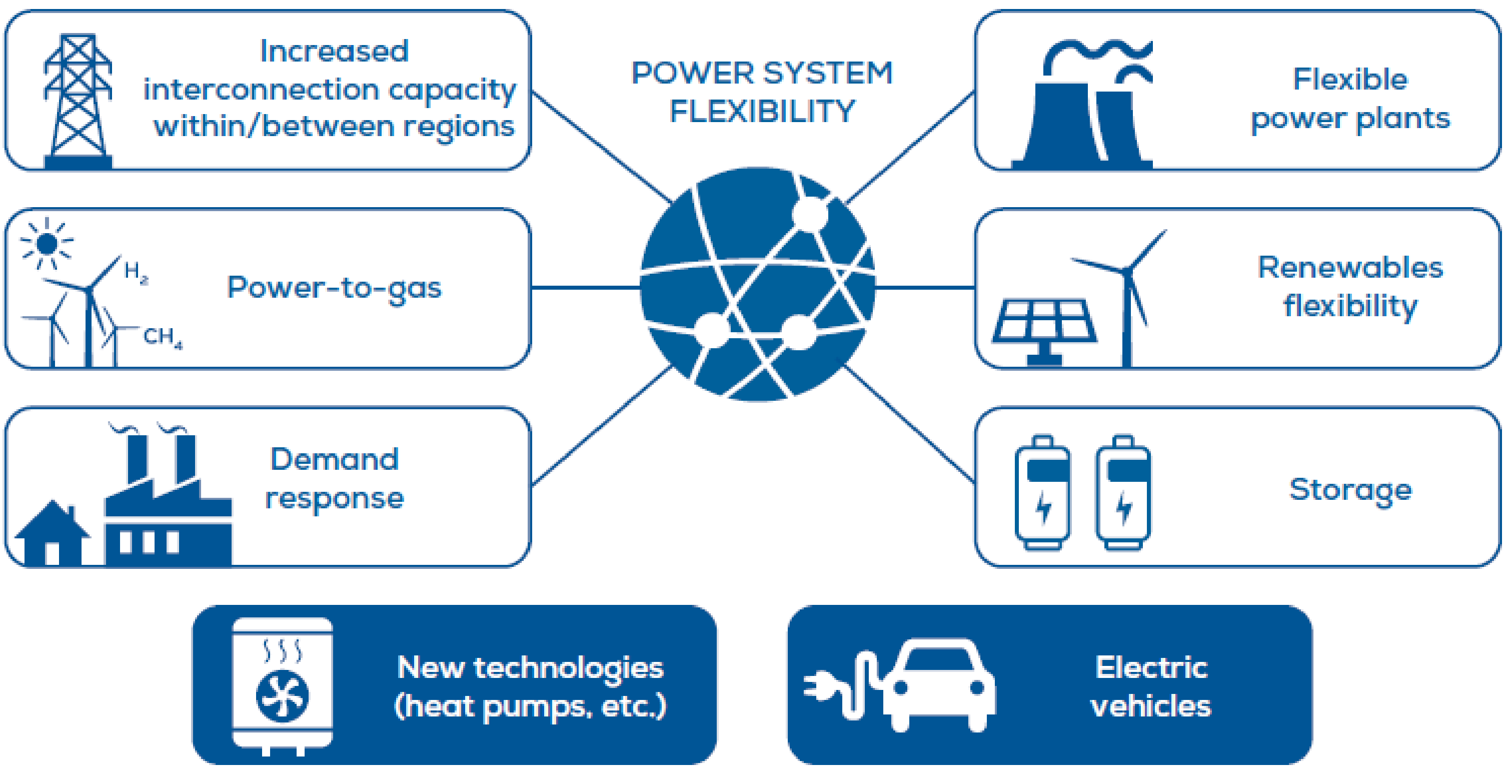
System flexibility helps integration of variable RES



Source: DNV GL for WindEurope

THANK YOU

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